

**ABSTRACT**

The invention relates to novel foams obtained by highly concentrated internal phase emulsion polymerization, which are formed from a crosslinked, exclusively hydrocarbon, polymer based on styrenic monomers and which exhibit a density at least equal to  $6 \text{ mg/cm}^3$  and at most equal to  $20 \text{ mg/cm}^3$  and cells with a mean diameter at most equal to 20 microns.

It also relates to the process for the manufacture of these foams.